

REMARKS

Because of the closure of the USPTO on September 19-20, 2003, this Amendment was filed on September 22, 2003, without payment of fee for 1-month extension of time to respond to the Action.

The Examiner's objections to the specification and claim 43 in paragraph 2-4 of the Action have been dealt with as suggested by the Examiner or by amending claims 43 to clarify that the "region of a join" is the region formed by a joint between the molded elements.

Claims 26 and 28 have been amended to recite "the substrate is arranged at the surface of the inner mold such that the reinforcing fiber does not extend continuously for two or more laps of a circumference of the inner mold." This limitation is supported in the specification in the first paragraph of page 32 and the second paragraph of page 61. The former states:

If, when arranging the substrate on the outer face of the inner mould the reinforcing fibre of the substrate extends for two or more laps of the circumference of the hollow inner mould, the pressure from the hollow inner mould is concentrated only in the reinforcing fibre and it is difficult to uniformly apply pressure to the structure as a whole. Moreover, by applying pressure to the interior, the hollow inner mould is made to expand radially and, furthermore, the reinforcing fibre also made to move a little to produce a slack-free state, so if the fibre extends for two or more laps then this movement will be impeded. As a result, the FRP structure may not be moulded to the desired shape and dimensions, and the escape of bubbles or the diffusion of resin may be inadequate, so that the characteristics of the FRP structure are not fully manifested. Consequently, it is preferred that arrangement of the substrate be carried out such that *reinforcing fibre does not extend continuously for two or more circuits of the hollow inner mould, that is to say it does not extend continuously over two or laps* of the circumference of the interior space of the hollow FRP structure. Now, reference here to the arrangement being carried out such that it does not extend continuously for two or more laps, means that at least 80 vol% (more preferably 90 vol% and still more preferably 95 vol%) of the reinforcing fibre in the FRP does not extend continuously for two or more laps, and it is not intended to exclude the case where even one reinforcing fibre extends continuously over two or more laps. [Emphasis added.]

Please note that MPEP 2173.05(i) clarifies that “there is nothing inherently ambiguous or uncertain about a negative limitation. ... Any such limitation or exclusionary proviso must have basis in the original disclosure.” In the present case, the negative limitation has a clear basis in the original disclosure.

Also, in claim 26, “a top” has been changed to “an outer periphery.” Please note that the term “outer periphery” is used in claim 28. Thus, this amendment of claim 26 makes this language of claim 26 consistent with that of claim 28.

Claims 28, 30 and 41 were rejected as being anticipated by Calapp. Claims 26-33, 37 and 41 were rejected as being obvious over WO 98/32589 in view of Nelson. Claims 28, 30-32, 37-38 and 40-43 were rejected as being obvious over Holloway in view of Calapp. Claims 34-36 were rejected as being obvious over Holloway in view of Calapp and further in view of Tunis. Claim 39 was rejected as being obvious over Holloway in view of Calapp and further in view of WO 98/32589. These rejections are respectfully traversed.

Claims 26 and 28 recite that “the substrate is arranged at the surface of the inner mold such that the reinforcing fiber does *not* extend continuously for two or more laps of a circumference of the inner mold.” [Emphasis added.] All of the cited prior art references relate to *filament winding* in which the reinforcing fiber of the substrate must extend for two or more laps of the circumference of the hollow inner mold. This is quite obvious to persons of ordinary skill in this art because just two laps of the reinforcing fiber on an inner mold would not result in any structure, much less a composite structure of the prior art references.

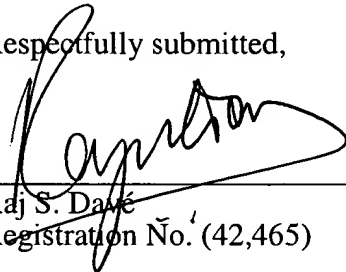
The Applicants respectfully submit that the Examiner should consider the negative limitation “not” in the manner it is referred in the specification in the context of the reinforcing fiber of the substrate being arranged at the surface of the inner mold in an embodiment of this invention and should not read the word “not” out of the claims. The Federal Circuit in *Lewmar Marine Inc. v. Barient Inc.* 827 F.2d 744, 3 USPQ2d 1776, *cert. denied*, 484 U.S. 1007 (Fed. Cir. 1988), explained that even the word “only” cannot be read of a claim. “The claim limitation could possibly read on the American Eagle winch if the word ‘only’ did not appear in that clause.

The word 'only,' however, is there and may not be read out of the claims." *Id.* Similarly, in this case, the word "not" may not be read out of the claims.

In light of the amendments, the anticipation and obviousness rejections should be withdrawn because *none* of the prior art discloses "the substrate is arranged at the surface of the inner mold such that the reinforcing fiber does *not* extend continuously for two or more laps of a circumference of the inner mold." [Emphasis added.]

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **360842007500**. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,



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Dated: April 2, 2004